

# Innovative Technology Transfer Partnership (ITTP)



## *Success Story*

## **Intergraph Solutions Group Licenses Trio of Imaging Software**

### **Description of Innovation**

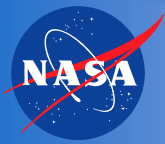
Intergraph Solutions Group out of Madison Alabama has recently licensed three Kennedy Space Center imaging software technologies titled Fuzzy Reasoning Edge Detection , Fuzzy Reasoning Adaptive Thresholding and Image Processing For Binarization Enhancement Via Fuzzy Reasoning. The Edge Detection software mimics the capability of humans to approximate solutions, making it ideal for detecting edges in noisy, cluttered environments and for detecting unfamiliar objects. The Adaptive Tresholding Software is ideal for binarizing noisy, cluttered or textured gray-scale images. It is faster and more reliable than other current, highly reliable methods and can transform a poorly faded signature, a weathered document or surveillance tape of a license plate into a clearer readable image. The Image Processing Enhancement software was developed specifically for Intergraph's uses.



VAS Before and after images.

### **Commercial Benefits**

Intergraph Solutions Group became aware of the technologies through a cooperative marketing effort by the Technology Transfer Office, Research Triangle Institute and the Regional Technology Transfer Center Network. KSC's Technology Transfer Office worked with the inventors to secure Intellectual Property Protection and negotiate the terms of the License Agreement for the technologies. Intergraph Solutions Group has been in the business of designing and producing high-end graphics systems for more than 30 years. Today, Intergraph's Integrated Products Division markets the leading video enhancement system, "VAS". Previously, Intergraph licensed and commercialized NASA's VISAR technology as a tool for stabilization and enhancement. VISAR was developed at NASA's Marshall Space Flight Center. Many of Intergraph's customers use VAS to identify license plates or other textual information from low quality video. Intergraph evaluation of the Fuzzy Reasoning and Binarization technologies determined that these technologies could provide a significant benefit to identify textual information in forensic video used in Intelligence, Surveillance and Reconnaissance markets.



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### Partnership Contributions

Intergraph Solutions Group will invest over \$50,000 into product development and marketing. Intergraph will integrate the software technologies into their Video Analysis Workstation toolset-offering it bundled with other toolsets and market the technology as well as update sales collaterals to include the features and benefits provided by this additional technology. The markets for this products are the laboratories and agencies which typically house sophisticated video editing and analysis tools like the FBI, forensic investigators and major Intelligence and Security agencies like the CIA.

### ITTP Role

In a coordinated effort between Research Triangle Institute (RTI), North Carolina, the Southeast Regional Technology Transfer Center at Georgia Tech in Atlanta Georgia and the NASA Kennedy Space Center Technology Transfer Office, the KSC imaging software was marketed nationwide to industries including medical, geophysical, photography, character recognition, and document clean up companies. RTI published a website for interested companies to review information and processed images enhanced by the technologies. John Geikler and Kirsten Reith of Research Triangle Institute fielded requests from companies with further interest in the technologies. Innovators, Jesus Dominguez and Steve Klinko of ASRC Aerospace provided answers to questions on the technology. NASA's James Nichols and ASRC's Jeff Kohler processed license applications for the technologies and software usage agreements for other government agencies.

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